### PATENT COOPERATION TREATY

## **PCT**

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### INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

(Chapter II of the Patent Cooperation Treaty)

(PCT Article 36 and Rule 70)

Applicant's or agent's file reference	EOD EUDTHED A	CTION			
2003CH017	FOR FURTHER A	CHON	See Form PCT/IPEA/416		
International application No.	International filing date	(day/month/year)	Priority date (day/month/year)		
PCT/IB2004/004288	23.12.2004		29.12.2003		
International Patent Classification (IPC) or r	national classification and I	PC	1		
D06P5/08, D06P5/06, C08G73/02,	C08G65/24, C08G65	333			
Applicant					
CLARIANT INTERNATIONAL LTD					
This report is the international pre- Authority under Article 35 and tra	Himinary examination rensmitted to the applicar	eport, established by this nt according to Article 36	s International Preliminary Examining s.		
2. This REPORT consists of a total	of 6 sheets, including t	nis cover sheet.			
3. This report is also accompanied i	•	•			
a. Sent to the applicant and t					
and/or sheets contain	sheets of the description, claims and/or drawings which have been amended and are the basis of this report and/or sheets containing rectifications authorized by this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions).				
beyond the disclosure	de earlier sheets, but w in the international app	hich this Authority consi lication as filed, as indic	ders contain an amendment that goes ated in item 4 of Box No. I and the		
Supplemental Box.					
sequence listing and/or tal	b. (sent to the International Bureau only) a total of (indicate type and number of electronic carrier(s)), containing a sequence listing and/or tables related thereto, in computer readable form only, as indicated in the Supplemental Box Relating to Sequence Listing (see Section 802 of the Administrative Instructions).				
4. This report contains indications re	elating to the following i	ems:			
☐ Box No. I Basis of the op	nion				
	ant of oninion with rose	and to morrolly burning the	atom and individual and P 1 22		
☐ Box No. IV Lack of unity of		ita to noveity, inventive s	step and industrial applicability		
		2) with recard to povelty	inventive step or industrial		
applicability; cit	ations and explanations	supporting such statem	ent		
☐ Box No. VI Certain docume	ents cited				
🖾 Box No. VII Certain defects	in the international app	lication			
☑ Box No. VIII Certain observa	ations on the internation	al application			
Date of submission of the demand		Date of completion of this	s report		
10.07.0005					
18.07.2005		24.01.2006			
Name and malling address of the internation	าลไ	Authorized Officer			
preliminary examining authority:			Justicelles Patantame		
European Patent Office - P.B NL-2280 HV Rijswijk - Pays B	Bas	Blas, V	A under the		
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# INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

International application No. PCT/IB2004/004288

	Box	(No. I	Basis of the report		
1.	With filed	n regard I, unless	regard to the <b>language</b> , this report is based on the international application in the language in which it was, unless otherwise indicated under this item.		
		which i ☐ inte ☐ pub	is the language of a to rnational search (und plication of the interna	slations from the original language into the following language , anslation furnished for the purposes of: er Rules 12.3 and 23.1(b)) tional application (under Rule 12.4) examination (under Rules 55.2 and/or 55.3)	
2.	hav	e been	furnished to the recei	the international application, this report is based on <i>(replacement sheets which ving Office in response to an invitation under Article 14 are referred to in this e not annexed to this report)</i> :	
	Des	cription	, Pages		
	1-32	2		as originally filed	
	Clai	ms, Nur	mbers		
	1-17	7		as originally filed	
		a sequ	ence listing and/or an	y related table(s) - see Supplemental Box Relating to Sequence Listing	
3.	<ul> <li>□ The amendments have resulted in the cancellation of:</li> <li>□ the description, pages</li> <li>□ the claims, Nos.</li> <li>□ the drawings, sheets/figs</li> <li>□ the sequence listing (specify):</li> <li>□ any table(s) related to sequence listing (specify):</li> </ul>				
4.	□ had Sup	This report has been established as if (some of) the amendments annexed to this report and listed below not been made, since they have been considered to go beyond the disclosure as filed, as indicated in the plemental Box (Rule 70.2(c)).  the description, pages the claims, Nos.  the drawings, sheets/figs the sequence listing (specify):  any table(s) related to sequence listing (specify):			
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## INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

International application No. PCT/IB2004/004288

Box No. V Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

1. Statement

Novelty (N)

Yes: Claims

1-17

No: Claims

Inventive step (IS)

Yes: Claims

1-17

No: Claims

Industrial applicability (IA)

Yes: Claims No: Claims 1-17

2. Citations and explanations (Rule 70.7):

see separate sheet

#### Box No. VII Certain defects in the international application

The following defects in the form or contents of the international application have been noted:

see separate sheet

#### Box No. VIII Certain observations on the international application

The following observations on the clarity of the claims, description, and drawings or on the question whether the claims are fully supported by the description, are made:

see separate sheet

#### Re Item V

Reasoned statement under rule 66.2(a)(ii) PCT with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

The following documents are mentioned for the first time in this written opinion; the numbering will be adhered to in the rest of the procedure.

D1: US 3 639 296 A (FROTSCHER HERBERT ET AL) 1 February 1972 (1972-02-01)

D2: GB 1 431 476 A (BASF AG) 7 April 1976 (1976-04-07)

D3: US 5 371 119 A (BOHLANDER RALF ET AL) 6 December 1994 (1994-12-06)

D4: US 4 737 576 A (BACHEM HENNING ET AL) 12 April 1988 (1988-04-12)

#### **Novelty:**

Document D1 discloses same kind of polymeric etheramines applied on textile materials to impart them durable antistatic properties.

The subject-matter of independent claim 1 differs from this known D1 in that the finishes are not applied on dyed textile materials, excepted in example IV, where textile have been dyed with disperse dyes which are not water soluble dyes.

The subject-matter of independent claim 1 is therefore new (Article 33(2) PCT).

The same reasoning applies, mutatis mutandis, to the subject-matter of independent claim 8, which therefore is also considered to meet the requirements of the PCT with respect to novelty and inventive step.

The subject-matter of independent claim 16 differs from this known D1 in that there is no other cationic dye fixative agent present in the composition.

Therefore, the subject-matter of independent claim 16 is new (Article 33(2) PCT).

The same reasoning applies, mutatis mutandis, to the subject-matter of independent claim 17, which therefore is also considered to meet the requirements of the PCT with respect to novelty and inventive step.

#### INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY (SEPARATE SHEET)

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The same reasoning applies similarly to D2 and D3. The polymeric etheramines are not applied as aftertreatment to textile materials dyed with water soluble-dyes.

#### Inventive Step:

D4 discloses etheramines for treating textile materials dyed with water-soluble dyes to improve their wet fastness like perspiration and wash fastness.

The subject-matter of independent claims 1, 8, 16 and 17 differs in the way of preparing the polymeric etheramines.

The problem to be solved by the present invention may be regarded as providing an aftertreatment for textile materials dyed with water-soluble dyes which improves chlorine fastness.

The solution to this problem is to use polymeric etheramines obtained by condensing an oligohydroxy compound with epichlorohydrin and then with an amino compound.

There are no hints in the prior art which would have lead the skilled person to use these kind of etheramines as aftertreatment of textile materials dyed with water-soluble dyes to improve their chlorine fastness, therefore the proposed solution is not obvious and the subject-matter of independent claims 1, 8, 16 and 17 involves an inventive step.

Claims 2-7 and 9-15 are dependent claims and as such also meets the requirements of the PCT with respect to novelty and inventive step.

#### **Industrial Applicability:**

The subject-matter of claims 1-17 is considered to meet the requirements of Article 33(4)PCT.

#### Re Item VII

Certain defects in the international application

#### INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY (SEPARATE SHEET)

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- 1) The document D1 has not been identified in the description and the relevant background art disclosed therein has not been briefly summarised in an objective way. Hence, the requirements of Rule 5.1(a)(ii)PCT are not fulfilled.
- 2) The independent claims have not been cast in a two part form, with those features which in combination are part of the prior art (see document D1) being placed in the preamble. Hence, the requirements of Rule 6.3(b)PCT are not met.

#### Re Item VIII

#### Certain observations on the international application

The present application does not meet the requirements of Article 6 PCT, in that the matter for which protection is sought is not correctly defined: it is not clear to which category belong claims 10-15, either to the category of "process" claims, or to the category of "use" claims.